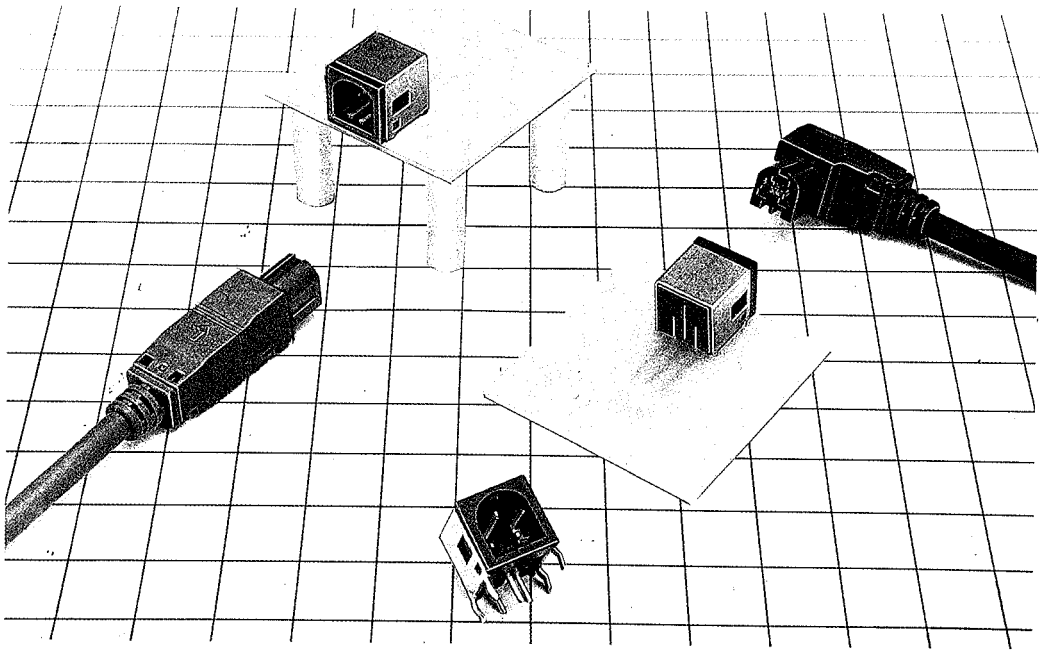
HRS RP34 SERIES COMPACT PLASTIC CONNECTOR FOR AC ADAPTER

■ Scope

Model RP34 Connector is a compact, lightweight, 3-pole plastic connector specially designed for the AC adapter interface for notebook type personal computers.

Plug is available in either straight type or right-angle type. Right angle type offers low insertion profile. The receptacle is a very compact part with a 10mm-square mating surface and 11.3mm depth.



■ Features

(1) Snap-lock locking permits easy insertion and disconnection.
(2) Right-angle plug permits cable take-out on either right side or left side depending on the application.
(3) One of the three poles is designed for grounding terminal which makes contact before the other two poles.
(4) D-shaped mating section permits easy insertion.
(5) Six different guide locations are available. Connectors can be installed in line permitting correct matching of receptacle and plug.
(6) Snap-fit assembling method for plug, eliminating use of screws, is easy and simple.
(7) The external appearance is simplified cubical shape and fits well to any equipment.

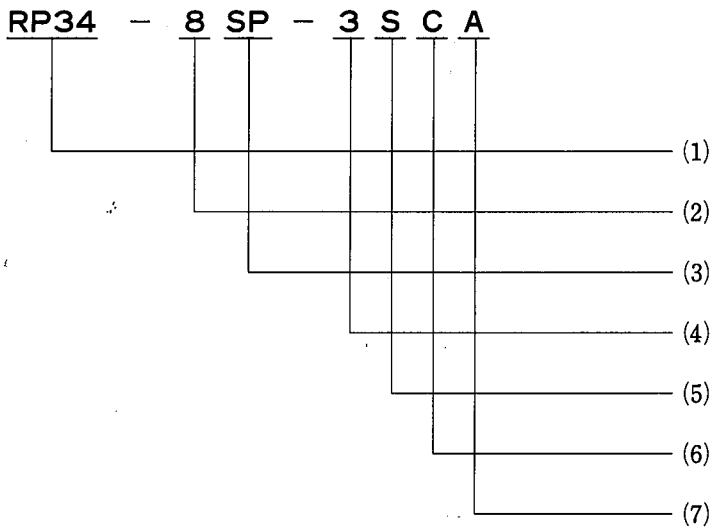
■ Application

OA equipment, communications equipment, audio equipment and small size electronic products.

■ Material and Finish

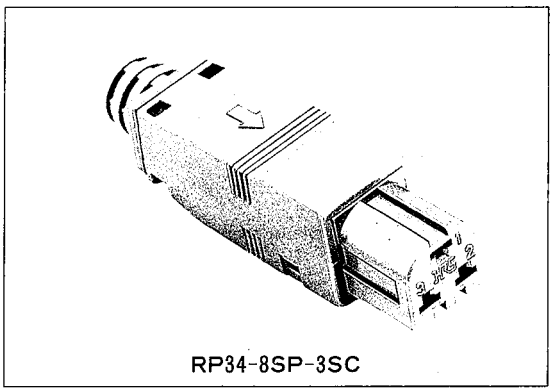
Part Name	Material	Finish
Main Frame and Insulator	Polycarbonate resin containing glass, and PBT resin UL94V-0	(Black)
Male Terminal	Brass	Silver plating
Female Terminal	Phosphor bronze	Silver plating

■ Ordering Information

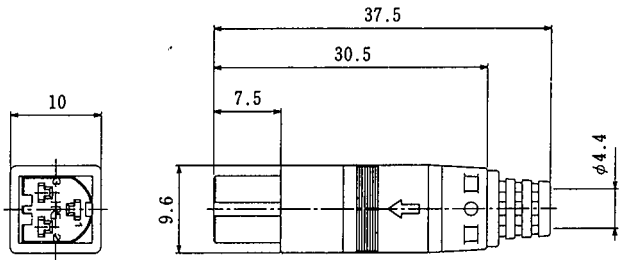


(1) RP34 : Name of series
(2) 8 : Size of shell, or outer dia. of mating section.
Size 8 is only available for this connector.
(3) SP : Type of connector.
SP : Straight plug
P : Right-angle plug
R : Receptacle
(4) 3 : Number of terminals.
3 and 4 pole is available for this connector.
(5) S : Contact Type.
P : Male contact
S : Female contact
(6) C : Wire-to-contact connecting method, or shape of terminal.
C : Crimping type
DL : Right-angle dip type
(7) A : Defines location of mating guide as A, B, D, E and F. Refer to figures on page 148 for detail. Mating is possible only between the same guide locations.

■ Straight Plug



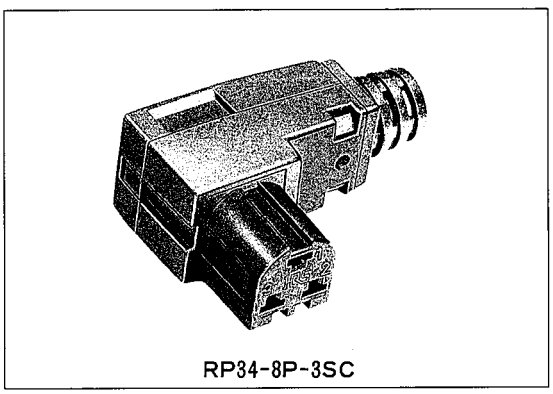
RP34-8SP-3SC



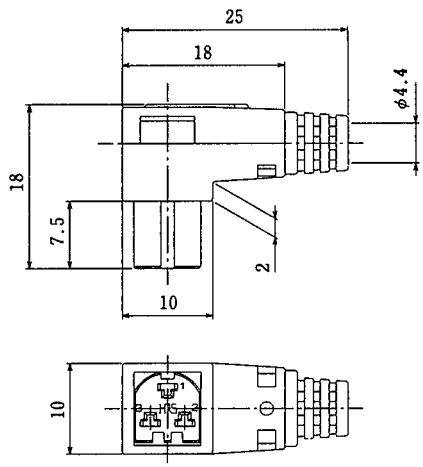
(An example in shape)

HRS No.	Part No.	No. of pins	A	Remark
113-5049-1	RP34-8SP-3SC	3	9.6	Standard Part
113-5059-5	RP34-8SP-3SCA	3	9.6	Mating Guide A
113-5060-4	RP34-8SP-3SCB	3	9.6	Mating Guide B
113-5061-7	RP34-8SP-3SCD	3	9.6	Mating Guide D
113-5062-0	RP34-8SP-3SCE	3	9.6	Mating Guide E
113-5063-2	RP34-8SP-3SCF	3	9.6	Mating Guide F
113-5097-4	RP34-8SP-4SC	4	11	Standard Part
113-5103-5	RP34-8SP-4SCA	4	11	Mating Guide A
113-5104-8	RP34-8SP-4SCB	4	11	Mating Guide B
113-5105-0	RP34-8SP-4SCC	4	11	Mating Guide C

■ Right-Angle Plug



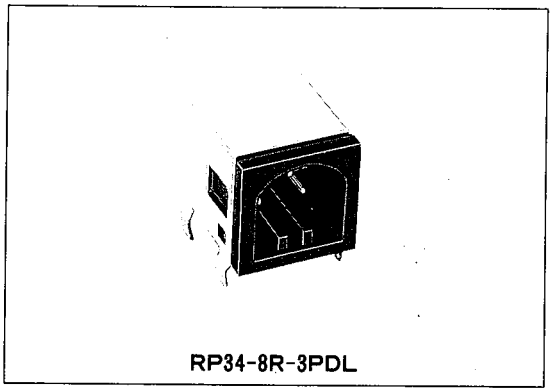
RP34-8P-3SC



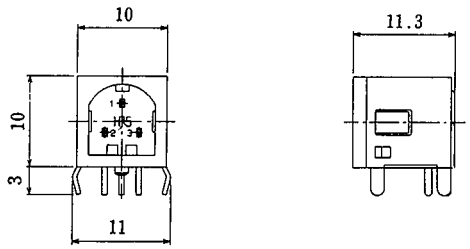
(An example in shape)

HRS No.	Part Number	Mating Guide
113-5041-0	RP34-8P-3SC	Standard Part
113-5054-1	RP34-8P-3SCA	Mating Guide A
113-5055-4	RP34-8P-3SCB	Mating Guide B
113-5056-7	RP34-8P-3SCD	Mating Guide D
113-5057-0	RP34-8P-3SCE	Mating Guide E
113-5058-2	RP34-8P-3SCF	Mating Guide F

■ Receptacle



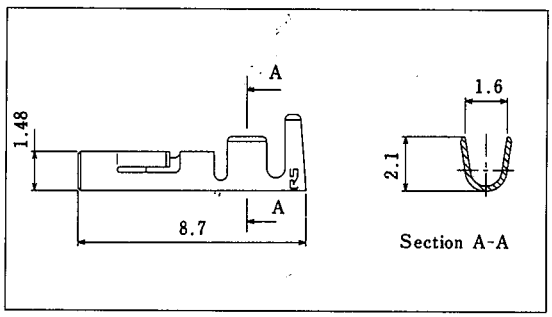
RP34-8R-3PDL



(An example in shape)

HRS No.	Part No.	No. of pins	A	B	Remark
113-5042-2	RP34-8R-3PDL	3	10	11	Standard Part
113-5064-5	RP34-8R-3PDLA	3	10	11	Mating Guide A
113-5065-8	RP34-8R-3PDLB	3	10	11	Mating Guide B
113-5066-0	RP34-8R-3PDLD	3	10	11	Mating Guide D
113-5067-3	RP34-8R-3PDLE	3	10	11	Mating Guide E
113-5068-6	RP34-8R-3PDLF	3	10	11	Mating Guide F
113-5098-7	RP34-8R-4PDL	4	11	12	Standard Part
113-5106-3	RP34-8R-4PDLA	4	11	12	Mating Guide A
113-5107-6	RP34-8R-4PDLB	4	11	12	Mating Guide B
113-5108-9	RP34-8R-4PDLC	4	11	12	Mating Guide C

■ Contact (Female Terminal)

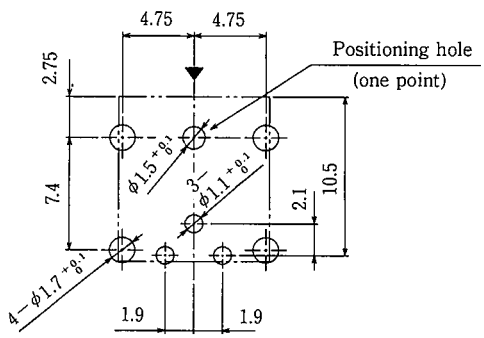


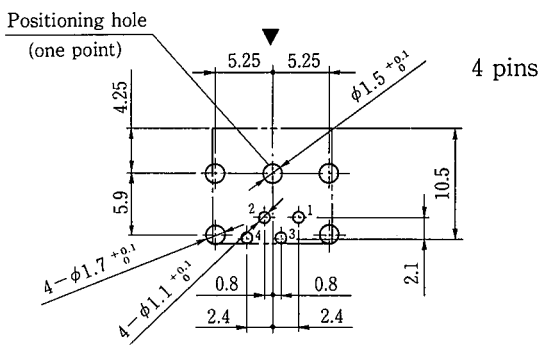
HRS No.	Parts No.	Remarks
113-5043-5	RP34-SC-212	Chain Contact
113-5076-4	RP34-SC-112	Loose Contact

Note:
1. Loose terminals are available in packs of 100 pieces. Strip terminals are available in reels of 10,000 pieces.

■ PCB Layout

3 pins



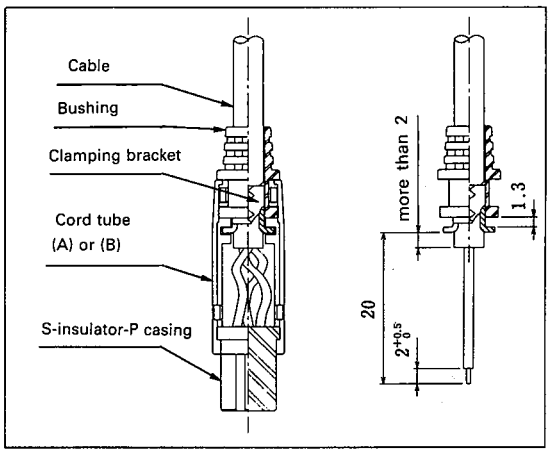


4 pins

1. Applicable board range is 0.8-1.6 mm in thickness.
2. Recommended dimensional arrangement tolerance for the board is ± 0.05mm.
3. The figure shows the board surface in which connector dip posts are to be inserted. ▼shows the mating surface.

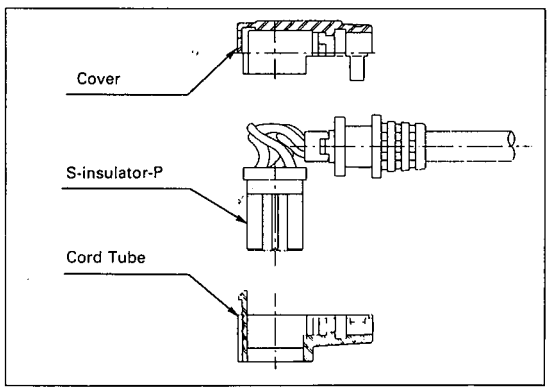
◆ Assembly Procedure

● Straight Plug



1. Insert bushing over terminated cable, and install terminal by crimping.
2. Put crimped terminal into the terminal hole of S-insulator-P casing. Lightly pull the cable to confirm crimped terminal is firmly engaged in the terminal hole.
3. Use proper tool (RP34-TC-01) to crimp fit clamping bracket to cable.
4. Assemble S-insulator-P casing, clamping bracket and bushing to cord tube (A) or (B) where applicable. S-insulator-P casing can be installed inverted 180°. Use suitable orientation as required.
5. Finally, assemble cord tube (A) or (B), whichever is remaining, to complete assembly.

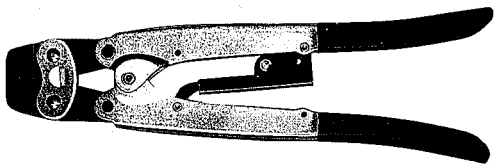
● Right-angle Plug



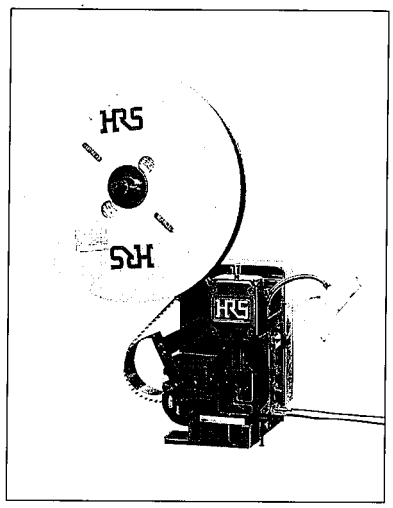
1. Same assembly procedures apply to either right-angle plug or straight plug. S-insulator-P casing can be installed 180 ° inverted against cord tube. Install the casing in the cable take-out direction as required.

Applicable Tools

Type	Item	HRS No.	Part No.	Applicable terminal	Applicable wire
Automatic	Automatic crimping machine body	901-0005-4	CM-105	—	—
	Applicator	901-2025-2	105-RP34-1	RP34-SC-212	AWG#18~#22
Cable crimping tool		150-0074-1	RP34-TC-01	—	—
Extractor		150-0072-6	RP34-SC-TP	—	—

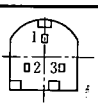
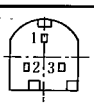
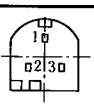
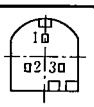
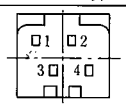
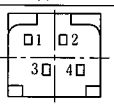
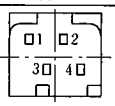
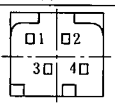


Cable Crimping Tool **RP34-TC-01**



Automatic Crimping Machine **CM-105**

Terminal Arrangement, guide locations and principal performance

Terminal Arrangement, 3 pins Guide locations	Standard Type	Type A	 Type B	 Type D	 Type E	 Type F	
Terminal Arrangement, 4 pins Guide locations	 Standard Type	 Type A	 Type B	 Type C			
No. of Poles	3,4 (Terminal No.1 is contacted faster than other terminal)						
Withstanding voltage	AC150V 1 min						
Current capacity	3A						
Insulation resistance	1,000MΩ Min (DC100V)						
Contact resistance	30mΩ Max(DC 100V)						
Applicable cable dia.	φ4						
Applicable cable	AWG#18~#22						

(Remarks) 1. Figures above show guide locations viewed from receptacle mating surface (from cable-connecting section of plug).
2. Voltage rating for normal use is 30VAC or 42VDC and under.